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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,823	03/27/2001	Henry Kopf III	2780-183	9987

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INTELLECTUAL PROPERTY / TECHNOLOGY LAW
PO BOX 14329
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

SAVAGE, MATTHEW O

ART UNIT PAPER NUMBER

1724

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/818,823	KOPF, HENRY	
	Examiner	Art Unit	
	Matthew O Savage	1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-13,16 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,10-13,16 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, 10-13, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kopf '930 in view of Demmer et al and/or Karbachsch et al.

With respect to claim 1, Kopf discloses all of the details of claim 1 including thin gasket layers 600, G1, G2 (see FIGS. 17 and 18) positioned adjacent to the main top and bottom surfaces of the filtration cassette, wherein the thin gasket layer comprises an elastic material for forming a fluid tight seal between top and bottom surfaces of the filtration cassette and adjacent structure engaged therewith and the gasket layer on each main top and bottom surfaces of the filtration cassette fully encapsulating top and bottom surfaces of the cassette with the exception of the inlet basin, outlet basin, and permeate passage openings of the filtration cassette. Kopf fails to specify the gasket as being bonded to the top and bottom surfaces of the cassette and bonded to and fully encapsulating the side surfaces of the cassette. Both Demmer et al (see FIG. 3, elementt 3) and Karbachsch el al (see FIG.2, element 90) disclose at least one thin gasket layer bonded and fully encapsulating all outer surfaces of the cassette except for inlet and outlet ports of the cassette (e.g., openings 50 shown in FIG. 3 of Demmer et al, and openings 50 shown in FIG. 1 of Karbachsch et al.), the thin gasket layer comprising an elastic material for forming a fluid tight seal between the filtration cassette

and adjacent structure engaged therewith. Demmer et al and Karbachsch et al suggest that such an arrangement facilitates assembly of the cassette with adjacent structure since the gasket is bonded to the cassette. It would have been obvious to have modified the cassette of Kopf so as to have included a thin gasket layer bonded to and fully encapsulating all outer surfaces of the cassette except for the inlet and outlet flow ports including the inlet basin, outlet basin, and permeate passage openings as suggested by Demmer et al and Karbachsch et al in order to facilitate assembly of the cassette with adjacent structure. Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application. Demmer et al and Karbachsch et al fail to specify the recited thickness values however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

Concerning claim 3, both Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application.

Regarding claims 4-5, Demmer et al and Karbachsch et al fail to specify the recited thickness values however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

Regarding claims 6-7, Demmer et al and Karbachsch et al fail to specify the

recited temperature resistance ranges, however, such a modification would have been obvious in order to optimize the cassette for a particular application.

Concerning claims 10 and 11, Karbachsch et al disclose silicone (see line 13 of col. 6).

Regarding claims 12 and 13, Karbachsch et al disclose molding (see lines 8-18 of col. 8).

As to claim 16, Kopf discloses the recited ports.

With respect to claim 19, Kopf discloses all of the details of claim 19 including thin gasket layers positioned adjacent to main top and bottom surfaces of the filtration cassette, wherein the thin gasket layer comprises an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith, the gasket assembly fully encapsulating the filtration cassette, and the gasket layers encapsulating main top and bottom surfaces of the filtration cassette except for the inlet basin, outlet basin, and permeate passage openings. Both Demmer et al (see FIG. 3, element 3) and Karbachsch et al (see FIG.2, element 90) disclose at least one thin gasket layer bonded to the cassette, the thin gasket layer comprises an elastic material for forming a fluid tight seal between the filtration cassette and adjacent structure engaged therewith, the thin gasket layer fully encapsulating the filtration cassette with the exception to inlet and outlet ports to the cassette (e.g., openings 50 shown in FIG. 3 of Demmer et al, and openings 50 shown in FIG. 1 of Karbachsch et al.) Demmer et al and Karbachsch et al suggest that such an arrangement facilitates assembly of the cassette with adjacent structure since the gasket is bonded to the

cassette. It would have been obvious to have modified the cassette of Kopf so as to have included the gasket layers bonded and fully encapsulating all surfaces of the cassette with the exception of inlet and outlet ports to the cassette as suggested by Demmer et al and Karbachsch et al in order to facilitate assembly of the cassette with adjacent structure. Demmer et al and Karbachsch et al disclose gasket layers including an elastomeric material but fail to specify the specific durometer ranges, however, such a modification would have been obvious in order to optimize the strength of the gasket for a particular application. Demmer et al and Karbachsch et al fail to specify the recited thickness values, however, such a modification would have been obvious in order to provide a proper seal for a given seal surface condition of the adjacent structure.

The declaration under 37 CFR 1.132 filed 7-28-04 is insufficient to overcome the rejection of claims 1, 3-7, 10-13, 16, and 19 under 35 U.S.C. 103 as being unpatentable over Kopf '930 in view of Demmer et al and/or Karbachsch et al as set forth in the last Office action because:

It include(s) statements which amount to an affirmation that the claimed subject matter functions as it was intended to function. This is not relevant to the issue of nonobviousness of the claimed subject matter and provides no objective evidence thereof. See MPEP § 716.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the

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grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

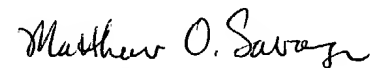
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Matthew O Savage
Primary Examiner
Art Unit 1724

mos
October 28, 2004